CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

ORDER NO. R2-2003-0030

WASTE DISCHARGE REQUIREMENTS AND WATER QUALITY CERTIFICATION FOR:

BEL MARIN KEYS COMMUNITY SERVICES DISTRICT

DREDGED MATERIAL REHANDLING/ DISPOSAL SITE

MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter referred to as the Board, finds that:

1. This Order will serve as Waste Discharge Requirements and Water Quality Certification under Section 401 of the Clean Water Act for navigational dredging of portions of Bel Marin Keys Lagoons and Novato Creek and for disposal or rehandling (dewatering and consolidation prior to off-site reuse or disposal at a landfill) of the dredged material at a nearby rehandling/disposal site operated by the Bel Marin Keys Community Services District (hereinafter referred to as "the BMKCSD" or "the Discharger").

2. This Order provides requirements for maintenance dredging activities and for operation and maintenance of the disposal/rehandling site. This Order also provides monitoring and reporting requirements, including effluent limits, for dredged material return flow (decant water). In addition, there are requirements for mitigating potential impacts that could occur from dredging near sensitive habitats in Novato Creek and for mitigating temporal impacts to seasonal wetland that has developed at the rehandling/disposal site.

SITE DESCRIPTION/HISTORY

3. Dredging sites: The BMKCSD is a California Special District (state agency responsible for providing services) to the community of Bel Marin Keys, a waterfront community located in an unincorporated area of northeastern Marin County east of the City of Novato and west of San Pablo Bay (Figure 1). The community consists of approximately 700 waterfront homes on two man-made lagoons, the North and South Lagoons, and Novato Creek. Sedimentation in the North Lagoon has reduced the water depths to as low as three feet in some areas, severely limiting recreational uses such as sailing and water skiing. Both lagoons are separated from Novato Creek by small navigational locks. Navigational access to San Pablo Bay is via Novato Creek. Studies for the Marin County Flood Control and Water Conservation District have documented rapid sedimentation in lower Novato Creek that has reduced the lowermost downstream portion of the creek to less than one half of its historical width and depth. The current water depths in Novato

Creek require most vessels to transit the channel to and from San Pablo Bay only during high tides and cause docks and vessels to sit in the mud during low tides.

Dredging will occur in both the North and South Lagoons and portions of Novato Creek as shown in Figure 2.

4. Disposal site: The confined disposal site, also known as the Leveroni Property, is bounded on the west and north sides by the channel which discharges Pacheco Pond into Novato Creek. The south side is bounded by Bel Marin Keys Boulevard and the east side by upland open space owned by the California Coastal Conservancy. The site was last used for disposal of dredged material in 1985 according to BMKCSD. It contains 28 acres of which less than 22 acres lie within existing levees and are available for dredged material rehandling/disposal. The site is a diked historic bayland with seasonal wetlands. Since the last disposal event, approximately 11.71 acres of wetlands under U. S. Army Corps of Engineers jurisdiction have developed at the site. These wetlands would be impacted by the dredged material disposal, but would be allowed to re-establish between dredge disposal episodes.

PROJECT DESCRIPTION

5. Disposal site improvements: The BMKCSD is proposing to make several structural site improvements to obtain maximum capacity to accommodate dredged material while minimizing the expense of building levees. The design plans include raising the levees on the in-board side of the site, excavating additional material to gain volume for disposal, and constructing a longitudinal levee approximately 1,700 feet long down the center of the site, which will force the dredged material effluent (decant water) to travel twice the length of the property before discharging into Novato Creek.

   Even after these improvements have been made, the site will still only provide capacity for about one half the volume of BMKCSD's current dredging needs. Therefore, dredging will initially have to be performed in two phases. In addition to dredging and initial dewatering, these phases will include settlement and secondary drying (1-2 years) and removal of the dried material for various disposal and/or reuse options that could include disposal at a permitted landfill, levee maintenance within the Novato Sanitary District, or use at other Regional Board approved sites needing fill material.

6. Over the next 10 years, the BMKCSD proposes dredging a total of 420,000 cubic yards of sediment from various locations in its two lagoons and from Novato Creek. The material will be collected in a hydraulic suction dredge mounted on a barge that has the ability to move around the North Lagoon, as well as along Novato Creek. The dredged material slurry, a mixture of sediment and water entrained at the dredging site, will be pumped through a flexible pipeline to a discharge point (that can be moved as necessary) near the southeast corner of the rehandling/disposal site basin. After flowing around the internal levee in the center of the basin in the direction indicated on Figure 3, the clarified decant water will discharge over an adjustable-height weir into a 450-foot long pipeline that will transport it to an outfall in Novato Creek immediately downstream of the existing Marin County flood control tide gate. The BMKCSD's consultants estimate that after a 3-5 day retention/settling time, the decant water will be clear enough to begin discharging to

Novato Creek. This Order requires a contingency plan for preventing discharge in the event that decant water effluent limits based on Regional Board Water Quality Control Plan (Basin Plan) water quality objectives are exceeded at the discharge weir (Provision E.2). The following table shows the proposed dredging schedule, locations of dredging and volumes of material to be dredged, and the proposed disposal locations.

Approximate dredging/disposal timeframe	**Source/location of dredging**	**Volume to be dredged (cubic yards)**	**Disposal location**
Phase I: 2003 - 2006 Phase II: 2006 - 2009	North Lagoon and Novato Creek	230,000 total: 200,000 (N. Lagoon) 30,000 (Novato Creek) approx. 115,000 in Phase I and 115,000 in Phase II	BMKCSD site initially. After dewatering, ultimate disposal at permitted landfill or reuse at permitted or Executive Officer-approved fill site.
Phase III: 2009 – 2013	North Lagoon, South Lagoon, and Novato Creek	60,000 total (15,000 per year)	Same as above
2003 - 2009	Same as above	90,000 total (15,000 per year)	Permitted disposal or reuse site/s to be determined
2004	South Lagoon rock shoal (area where rock riprap has slid from levee)	5,000	Existing rock enforced area on landward slope of adjacent levee
2003 or 2004	North Lagoon (paid for by OES funds and FEMA)	35,000	Port Sonoma Marina upland disposal site
		Ten-year Total: 420,000 cubic yards	

WATER QUALITY CONCERNS

7. Impacts to water quality resulting from dredged material placement at the rehandling/disposal site are expected to be minimal at worst and would be mostly related to the potential for suspended solids in the decant water to cause excess turbidity in the vicinity of the discharge point in Novato Creek. Results of pre-dredge sediment characterization testing conducted on Novato Creek and Bel Marin Keys Lagoon sediments between 1994 and 2002 have shown all but one chemical contaminant, mercury, to be below levels of concern. Mercury levels measured ranged from non-detectable at 0.05 mg/kg to 0.97 mg/kg (about twice the ambient level of 0.43 mg/kg in fine-grained SF Bay sediment), with a mean value of 0.38 mg/kg for 26 samples taken between 1994 and 2002. The highest concentration of 0.97 mg/kg was measured in 1997 and has not recurred in the 24 measurements made since that sampling event.

IMPACTS/MITIGATION

8. Dredging Sites: Small runs of steelhead trout, a federally listed threatened species, have occurred in Novato Creek in recent years according to Marin County Flood Control District personnel. Disturbance to steelhead can be avoided by restricting dredging activities to months that don't coincide with steelhead spawning runs (Specification D.1).

   Both the California clapper rail, a federally and state listed endangered species, and the California black rail, a federal species of concern and a state listed threatened species, are known to occur near the mouth of Novato Creek. According to the USFWS California Clapper Rail Recovery Plan, the area of Novato Creek between the creek mouth and 1 km upstream supports a substantial breeding population of clapper rails. Dredging in Novato Creek will be restricted to the thalweg of the main channel to prevent loss of rail habitat in tidal marsh at the edges of the creek (Specification D.2). Disruption of rail breeding activities will be minimized by prohibiting dredging during the nesting season of any given year (Specification D.3). In addition, the pipeline transporting dredged material from the Novato Creek to the disposal site will be routed down the centerline of the creek so that it doesn't impact tidal marsh habitat (Specification D.4).

9. Disposal Site: The 11.71 acres of Clean Water Act Section 404 wetlands located on the proposed disposal site would be temporarily disturbed during the placement and drying of dredged material. The BMKCSD maintains that, given the history of the disposal site, wetland conditions similar to those currently present at the site will become reestablished subsequent to completion of dredging and disposal operations, therefore, wetland impacts would be temporal rather than long term, self-mitigating, and less than significant. The resulting wetland area would remain an enclosed basin and be contoured to encourage development of wetland habitat after completion of each dredged material placement and drying episode.

   The disposal site does not contain viable habitat for any species identified as a candidate, sensitive, or special status species in local/regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.

BENEFICIAL USES

10. The BMKCSD Dredged Material Rehandling/Disposal Site is located adjacent to the Pacheco Pond Channel, which drains into Novato Creek, a tributary of San Francisco Bay. Decant water generated during dredged material settling will be discharged directly to Novato Creek. The beneficial uses of the waters adjacent to the BMKCSD Dredged Material Disposal Site as set forth in the Basin Plan are as follows:

    i. Water Contact Recreation

    ii. Non-Contact Water Recreation

    iii. Wildlife Habitat

    iv. Industrial Service Supply

    v. Wildlife Habitat

    vi. Preservation of Rare and Endangered Species

vii. Fish Migration

viii. Navigation

ix. Ocean, Commercial, and Sport Fishing

x. Fish Spawning

xi. Estuarine Habitat

CEQA COMPLIANCE

11. The BMKCSD filed a Mitigated Negative Declaration for this project with the State Clearinghouse on January 2, 2003. The Board concurs that the Project will not result in significant environmental impacts.

12. The action to adopt waste discharge requirements and water quality certification for this project is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Section 15301, Title 14, California Administrative Code.

ADDITIONAL FINDINGS

13. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, 1995, respectively. USEPA approved this Plan and a subsequent amendment in May 2000. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations, section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters. This Order is in compliance with the Basin Plan.

14. The specifications and limitations in these requirements are based on the plans, policies, and water quality objectives of the Basin Plan, Quality Criteria for Water (EPA440/5-86-001, 1986; Gold Book and 63 Federal Register 68354, December 10, 1998), Applicable Federal Regulations (40 CFR Parts 122 and 131), the National Toxics Rule (57 FR 60848, 22 December, 1992; NTR), California Toxics Rule (40 CFR Parts 131), and Best Professional Judgment.

15. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the CWC and Section 3867 of Title 23 of the California Code of Regulations (23 CCR).

16. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

17. Certification is conditioned upon total payment of the full $20,000 fee required in State regulations (23 CCR Section 3833) and owed by the applicant. The Regional Board received the initial $500 application fee on December 18, 2002.

18. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.

19. The Regional Board, in a public meeting on April 16, 2003, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger, BMKCSD, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

A. DISCHARGE PROHIBITIONS:

1. The direct discharge of wastes to surface waters or surface water drainage courses is prohibited, except as authorized in this Order.
2. The discharge shall not cause degradation of any water supply.
3. The dredged material shall remain within all the designated disposal areas at all times.
4. The activities subject to these requirements shall not cause a condition of pollution or nuisance as defined in Sections 13050 (l) and (m), respectively, of the California Water Code.

B. DISCHARGE SPECIFICATIONS

1. Appropriate soil erosion control measures shall be undertaken and maintained to prevent discharge of sediment to surface waters or surface water drainage courses. Dredged material shall be fully contained to prevent any wind transport, surface runoff or erosion into waters of the state. At no point within the containment area shall the elevation of sediment exceed that of the containment levees.
2. The integrity of the dredged material transport pipeline shall be maintained along its entire length from the intake at the suction dredge to the point of discharge into the containment area at the rehandling/disposal site. At no point other than the designated discharge point shall water or sediment be allowed to leak from or be intentionally released from the pipeline.
3. In accordance with Section 13260 of the California Water Code, the Discharger shall file a report with this Regional Board of any material change or proposed change in the character, location, or volume of the discharge. Any proposed material change in the operation shall be reported to the Executive Officer at least 7 days in advance of implementation of any such proposal.
4. The responsible representative of the Discharger shall immediately notify the Regional Board staff by telephone whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this Order, significant spill of petroleum

products or toxic chemicals, or damage to control facilities that could affect compliance. Pursuant to Section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Regional Board within 30 days of occurrence. The written notification shall identify the adverse condition, describe the actions necessary to remedy the condition, and specify a timetable, subject to the modifications of the Regional Board, for the remedial actions.

C. EFFLUENT LIMITATIONS

Dredged material effluent (decant water) discharged from any point within the rehandling/disposal site shall not exceed the following limits at any time:

i) pH	6.5 – 8.5
ii) Dissolved Sulfide	0.1 mg/L
iii) Total Suspended Solids	100 mg/L

D. RECEIVING WATER LIMITATIONS

1. The placement of sediments and/or decant water shall not cause the following conditions to exist in waters of the State at any place:
    a. Floating, suspended or deposited macroscopic particulate matter or foam;
    b. Visible floating, suspended, or deposited oil or other products of petroleum origin;
    c. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses; and
    d. Alteration of temperature, turbidity, or apparent color beyond present natural background levels.
2. The placement of dredge material shall not cause the following limits to be exceeded in waters of the State at any point:

a. Dissolved Oxygen:	7.0 mg/l minimum. When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
b. Dissolved Sulfide:	0.1 mg/l maximum.
c. pH:	A variation of natural ambient pH by more than 0.5 pH units.

d.	Toxic or other deleterious substances:	None shall be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
e.	Un-ionized Ammonia:	0.025 mg/L as N, annual median; and 0.16 mg/L as N, maximum.
f.	Total Dissolved Solids:	The project shall not increase total dissolved solids or salinity to adversely affect beneficial uses

3. Turbidity shall not exceed background of the Waters of the State, as measured in NTU, as follows:

Receiving Water Background	**Incremental Increase**
< 50 units	5 units, maximum
50-100 units	10 units maximum
>100 units	10% of background, maximum

4. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. MITIGATION MEASURE SPECIFICATIONS

1. In order to reduce potential impacts to steelhead trout to a level of insignificance, dredging in Novato Creek shall be allowed only during the months of September and October (possibly November contingent upon consultation with NOAA Fisheries biologists initiated by the U.S. Army Corps of Engineers).

2. Dredging within Novato Creek shall be restricted to the thalweg of the main channel of the creek, and conducted such that tidal marsh at the edges of the creek is not affected. Prior to dredging of Novato Creek a pre-dredge survey will be conducted, and the BMKCSD will prepare cross sections of proposed areas to be dredged demonstrating that adjacent marsh providing rail habitat will not be directly impacted. (See Provision E.3).

3. Dredging operations within Novato Creek shall not occur during the California clapper rail or California black rail breeding season from February 1 through August 31 of any given year.

4. During placement, the pipeline delivering dredged material from Novato Creek to the rehandling/disposal site shall be dragged downstream along the centerline of the creek and not allowed to traverse areas of tidal marsh at any time during dredging operations.

E. PROVISIONS

1. Data characterizing the quality of sediments proposed for rehandling or disposal at the BMKCSD facility subsequent to the initial dredging episode (Phase II and beyond) shall be submitted for Regional Board staff review and approval prior to placement. This review should be coordinated through the multi-agency Dredged Material Management Office, of which the Regional Board is a member. Sediment characterization shall follow the protocols specified in U.S. Army Corps of Engineers Public Notice 01-01 (or most current guidance), unless explicitly exempted in writing by the Executive Officer. Sediment characterization shall also include testing for leachable metals using the Title 22 Waste Extraction Test (WET) procedure (California Code of Regulations, Title 22. Division 4.5, Article 5, Section 66261.126, Appendix II: Waste Extraction Test Procedures). The WET procedure may be modified to use deionized water in place of the citrate buffer. Other extraction procedures may be used, with approval by Regional Board staff. Modifications to these procedures may be approved on a case-by-case basis.

2. **Site Operation Plan**: The BMKCSD shall submit an Operation Plan, acceptable to the Executive Officer, detailing ongoing operations for the site. This Operation Plan shall describe site operations and procedures to be followed before, during, and after dredge sediment placement, including a contingency plan for preventing discharge of dredged material effluent (decant water) in the event that monitoring conducted according to the attached Self-Monitoring Program shows one or more exceedances of the limits for pollutants listed under Provision D.2. The plan shall specifically state how further discharge will be prevented until monitoring demonstrates compliance with the decant water discharge limits. The Operation Plan shall also include emergency procedures for potential risks, including levee failures.

   Due Date: The Site Operation Plan shall be submitted no less than 30 days prior to commencement of Phase I dredging activities.

3. **Novato Creek Pre-Dredge Surveys**: Prior to each dredging episode in the Novato Creek channel, the BMKCSD shall submit a pre-dredge survey, acceptable to the Executive Officer, containing cross sections of proposed areas to be dredged demonstrating that adjacent marsh providing clapper rail habitat will not be directly impacted.

   Due Date: Novato Creek Pre-Dredge Surveys shall be submitted no less than 30 days before any dredging in Novato Creek is scheduled to begin

4. **Mitigation Implementation and Monitoring Plan:** The BMKCSD shall submit a mitigation implementation and monitoring plan, acceptable to the Executive Officer, to mitigate for the project's temporary impacts to wetlands within the rehandling/disposal site. The mitigation implementation and monitoring plan shall include (a) a schedule for mitigation implementation, (b) a proposed monitoring program to be conducted until mitigation is successful or until five years of post-implementation monitoring have been completed, whichever is longer, (c) proposed mitigation success criteria, and (d) a long-term maintenance program that adequately specifies the parties responsible for maintaining the created wetlands until mitigation is demonstrated to be successful.

   Due Date: The Mitigation Implementation and Monitoring Plan shall be submitted no later than September 30, 2003

5. The BMKCSD shall conduct monitoring activities according to the Self-Monitoring and Reporting Program (SMP) attached to this Order and as may be amended by the Executive Officer. At any time after adoption of this Order, the Discharger may file a written request proposing modifications to the attached SMP. If the proposed modifications are acceptable, the Executive Officer may issue a letter of approval incorporating the revisions into the SMP.
6. The BMKCSDshall notify the Regional Board immediately whenever violations of this Order are detected.
7. All reports following these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
8. The discharge of any hazardous waste, as defined in Title 23, Chapter 15 of the California Administrative Code, to the disposal site is prohibited.
9. Only dredged material that has been demonstrated to be non-hazardous and meets the applicable guidelines and criteria specified in this Order may be discharged at the disposal site.
10. The Discharger shall remove and relocate any wastes that are discharged at this site in violation of these Requirements.
11. The ultimate offsite disposal or reuse of the dried dredged material is subject to the approval of the Executive Officer. This approval will be based upon a demonstration that the ultimate disposal will occur at a site that has Waste Discharge Requirements (WDRs) or a waiver from this Regional Board, or other appropriate Regional Board if the ultimate disposal site is outside this Board's geographic boundaries.
12. The Discharger shall file with the Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
13. The Discharger shall maintain a copy of this Order at the site to be available at all times to site operating personnel.
14. The Discharger shall permit the Board or its authorized representative, upon presentation of credentials:

- Entry on to the premises on which wastes are located or in which records are kept.
- Access to copy any records required to be kept under the terms and conditions of this Order.
- Inspection of any treatment equipment, monitoring equipment or monitoring method.
- Sampling of any discharge or surface water covered by this Order.

15. These Requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws, regulations or rules of other programs and agencies nor do these Requirements authorize the discharge of wastes without appropriate permits from other agencies or organizations.

16. The implementation of this Order is subject to the BMKCSD, through the its binding and enforceable agreement for purchase of the rehandling/disposal site (Leveroni site) (1) acquiring title to the Leveroni site; or (2) obtaining the legal right from the owners of the Leveroni site to implement this Order.

17. This Order expires ten years from the date of issuance.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 16, 2003.

Loretta K. Barsamian
LORETTA K. BARSAMIAN
Executive Officer

Attachment: Figure 1 - Site Location Map
Figure 2 – Proposed Dredging Locations
Figure 3 – Dredged Material Flow Path
Self Monitoring and Reporting Program

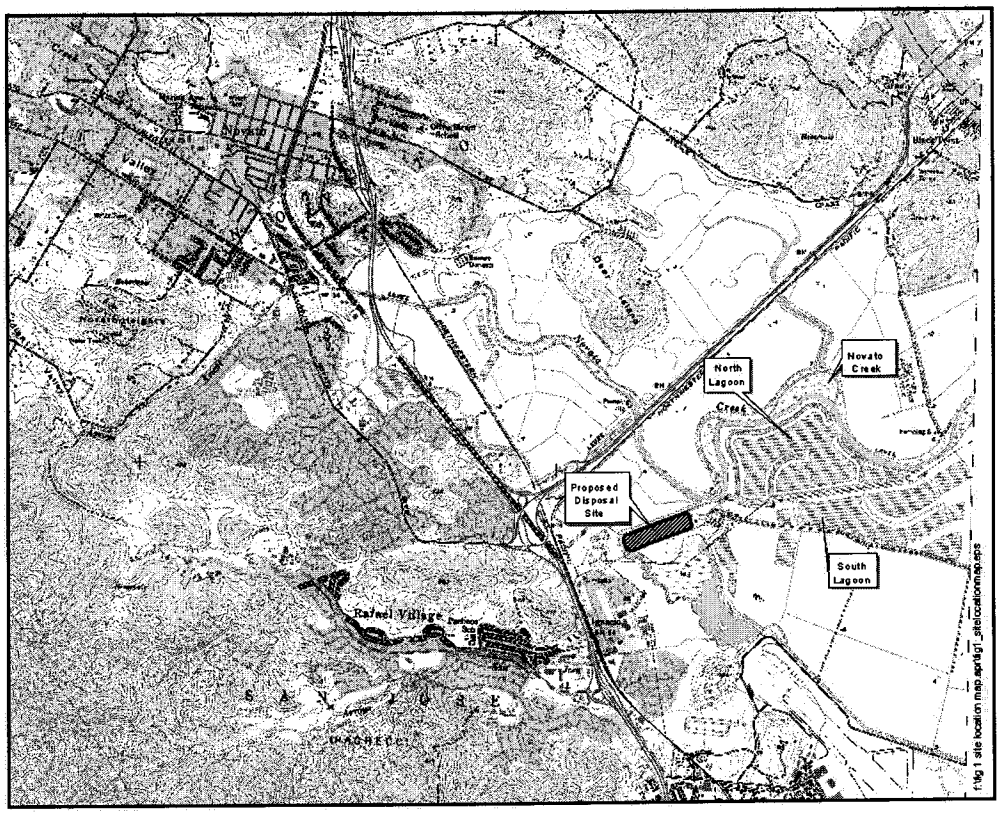

Figure 1. Site Location Map

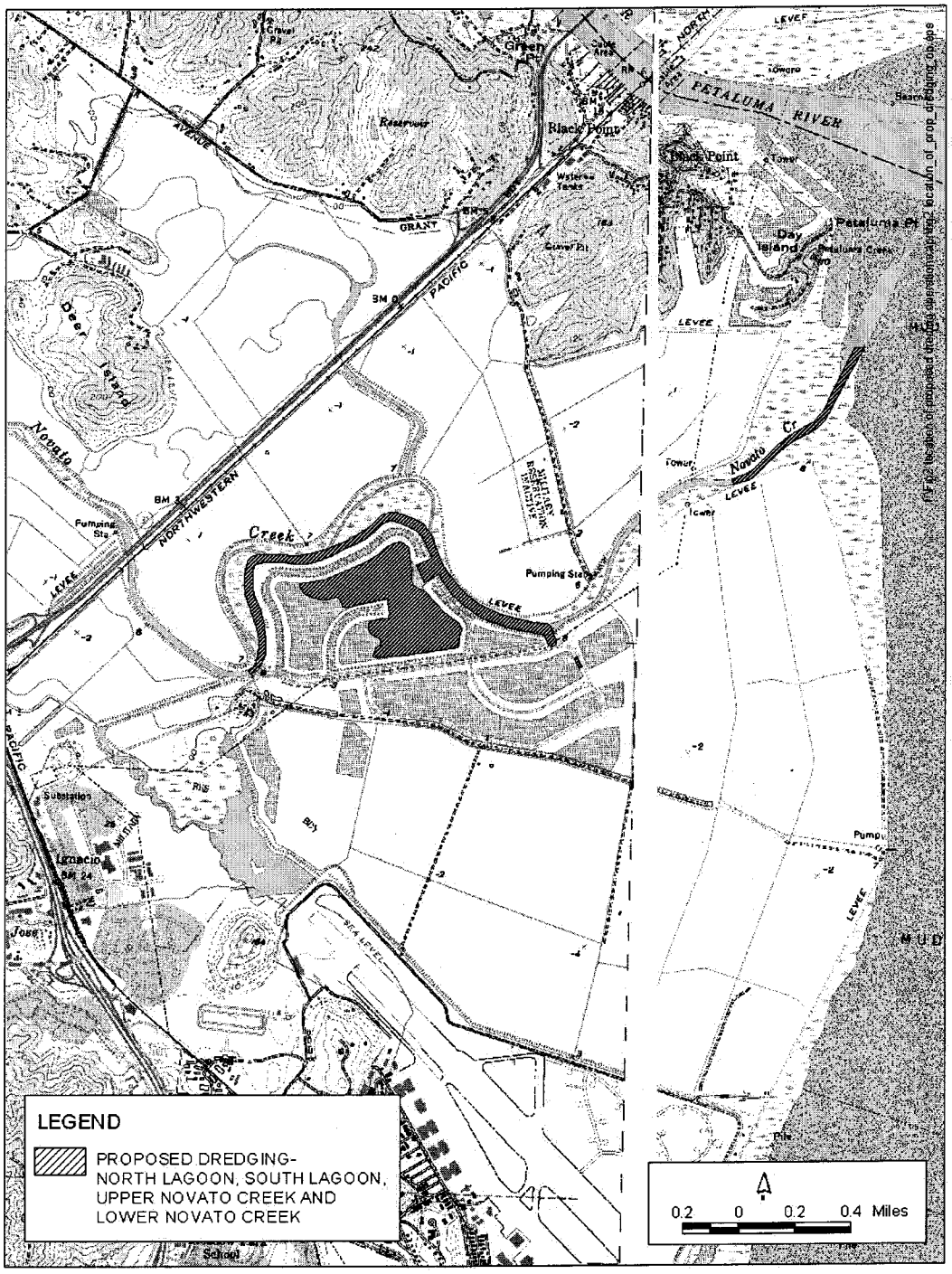

Figure 2. Location of Proposed Dreding Operations

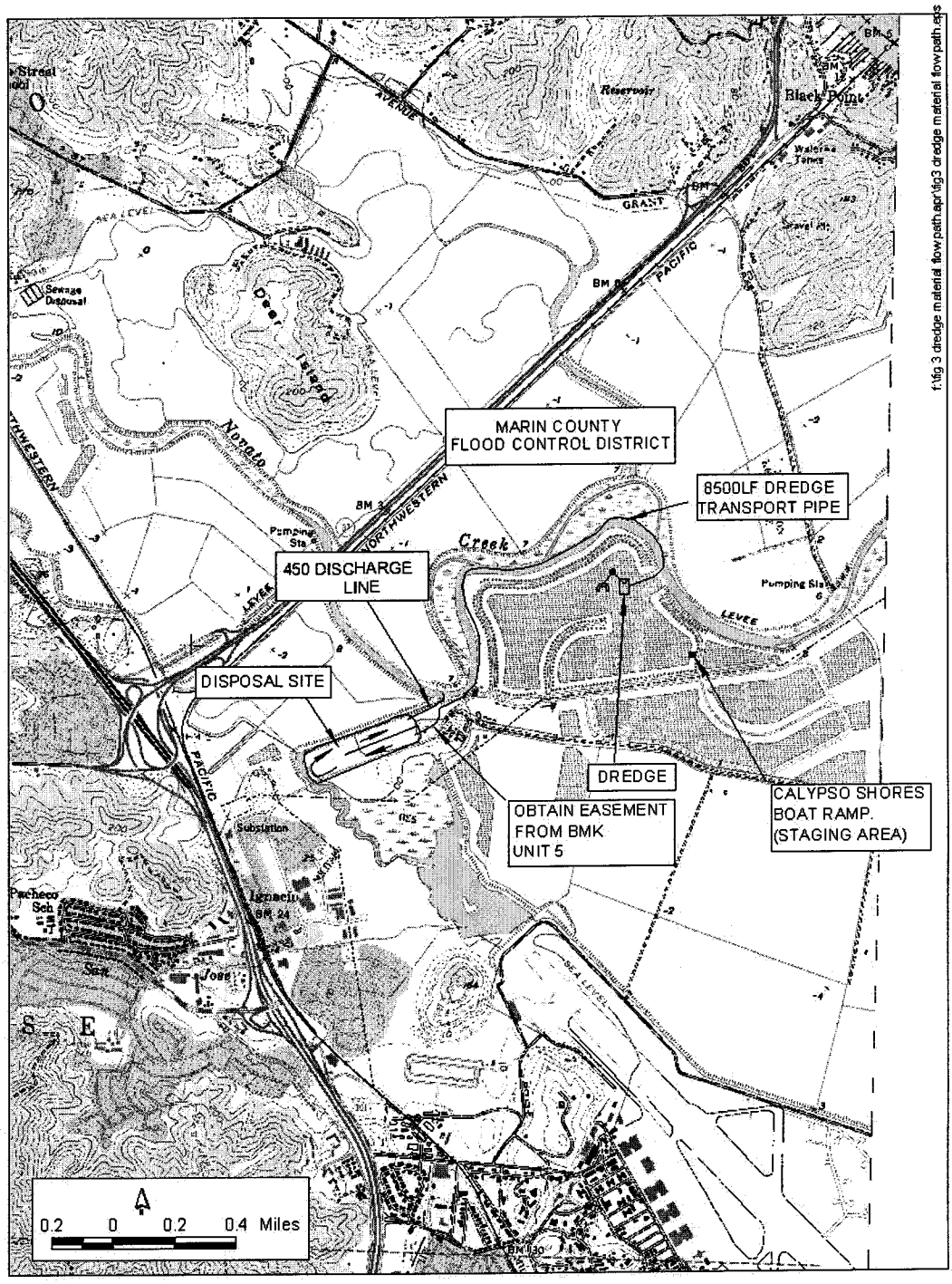

Figure 3. Dredge Material Flow Path

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING AND REPORTING PROGRAM
FOR

BEL MARIN KEYS COMMUNITY SERVICES DISTRICT

DREDGED MATERIAL REHANDLING/ DISPOSAL SITE

MARIN COUNTY

ORDER NO. R2-2003-0030

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

1. Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. This Self-Monitoring Program is issued in accordance with Provision 6 of Regional Board Order No. R2-2003-0030.
2. The principal purposes of a discharge monitoring program are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste dischargers in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of standards of performance and toxicity standards, (4) to assist the dischargers in complying with the requirements of the California Code of Regulations.

B. SAMPLING AND ANALYTICAL METHODS

1. Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods for the Analysis of Water and Wastewater
2. Water and sediment analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.
3. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A **grab sample** is a discrete sample collected at any time.
2. **Decant Water**, also known as overlying water, or return water, is the water entrained with the sediment particles during dredging. After suspended sediment concentrations have been reduced through discrete settling in the rehandling/disposal site retention basin, the clarified decant water will ultimately discharge to Novato Creek.
3. **Receiving waters** refers to any waterbody that actually or potentially receives surface or groundwater, which passes over, through, or under dredged sediment during placement, dewatering, settling/consolidation, and excavation/removal activities. Novato Creek is considered the immediate receiving water body for the decant water discharge. Pacheco Pond Channel is a potential unintended receiving water body.
4. A rehandling/disposal site operational **episode** consists of continuous dredged material slurry placement in the retention basin that stops for no more than 30 consecutive days. If placement stops for more than 30 consecutive days and then starts up again, the date of start-up will be considered the beginning of a new operational episode for monitoring purposes.

5. **Receiving Waters Standard Observations** refer to:
   a. Evidence of floating and suspended materials generated by the construction activities, as recorded by visual observations.
   b. Discoloration and turbidity: description of color, source, and size of affected area.
   c. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.

5. **Site Standard Observations** refer to visual inspection of:
   a. The overall condition and integrity of the perimeter containment levees.
   b. The location of placed material, amount of freeboard available, and whether any discharge of dredged sediments outside of the containment levees has occurred.
   c. The overall condition and integrity of the dredged material effluent (decant water) discharge weir.
   d. The overall condition and integrity of the dredged material transport pipeline along its entire length from the intake at the suction dredge to the point of discharge into the containment area.

6. **Decant Water Monitoring** refers to:
   a. Analyses as described in Table 1, below

Table 1. Standard Analyses for Receiving Water Monitoring

Constituent	Units
Dissolved Oxygen	mg/l
Dissolved Sulfide	mg/l
pH	Std units
Un-ionized Ammonia	mg/l
Total Suspended Solids (TSS)	mg/l
Turbidity	NTU

   b. Any additional analyses required by the Board on a case-by-case basis if it is determined that there is a potential for receiving water limits to be exceeded

D. SCHEDULE OF OBSERVATIONS AND MONITORING

The Dischargers are required to perform observations and monitoring according to the schedule in Part B.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the Dischargers or their laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.
2. Date and time of sampling and the name of the person performing the sampling.
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
5. Calculation of results.
6. Results of analyses, and detection limits for each analysis.

F. REPORTS TO BE FILED WITH THE BOARD

1. Written monitoring reports shall be filed each month, by the 30^{h} day of the following month, during which placement of material onto the site occurs.

   The reports shall contain the following:

   a. Letter of Transmittal

      A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the Dischargers have previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by the duly authorized representative of the Bel Marin Keys Community Services District if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

   b. The quantity and locations of dredged material placed at the site and a description of maintenance activities occurring during the reporting period.

   c. A map or aerial photograph shall accompany each report showing observation and monitoring stations.

   d. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

      i. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer.

      ii. In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the

method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than the recovery acceptance limits specified in the USEPA method procedures or the laboratory's acceptance limits, if they are more stringent than those in the USEPA method procedures; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

e. A summary and certification of completion of all Standard Observations for the facility.

2. By March 1 of each year, the Discharger shall submit an annual report to the Regional Board covering the previous calendar year activities. This report shall contain the following:

   a. Summaries of the quantities and locations of dredged material placement and the source of the dredged material.

   b. An estimate of the total volume of dried dredged material, if applicable, that was reused or disposed of offsite during the past year along with a description of the reuse or disposal location(s) where this material was sent.

   c. An estimate of the total volume of decant water generated from dewatering the dredged material.

   d. A summary of site maintenance activities.

   e. Tabular and graphical summaries of the monitoring data obtained during the previous year.

   f. A description of the compliance record and corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Waste Discharge Requirements.

3. **Contingency Reporting**

   A report to the Executive Officer and Regional Board case manager shall be made by telephone of any accidental discharge of whatever origin immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

   a. A map showing the location(s) of discharge(s);

   b. Approximate flow rate;

   c. Nature of effects, i.e., all pertinent observations and analyses; and

   d. Corrective measures underway or proposed.

PART B: MONITORING AND OBSERVATION SCHEDULE

A. DESCRIPTION OF OBSERVATION AND MONITORING STATIONS

1. **Receiving water standard observations** shall be made along the entire length of the Pacheco Pond Channel adjacent to the perimeter containment levee and within a 100 foot radius of the decant water discharge outfall in Novato Creek.
2. **Site standard observations** shall be made along the entire length of the perimeter containment levee of the rehandling/disposal area and along the entire length of the dredged material transport pipeline.
3. Grab samples of water for **decant water monitoring** shall be taken on the inboard side of the rehandling/disposal site discharge weir spillway.

B. SCHEDULE OF OBSERVATIONS AND MONITORING

1. The schedule of observations and monitoring is provided in Table 2, below:

Table 2. Observations and Monitoring Schedule for the BMKCSD Dredged Material Rehandling/Disposal Site

Observation/Monitoring Frequency	Type	Location	Reporting Frequency (Due Date)
Daily during operations	Receiving water standard observations	Pacheco Pond Channel adjacent to the perimeter containment levee and Novato Creek within a 100-foot radius of decant water outfall	Monthly (30^{th} of the month following the reporting period)
	Site standard observations	Along perimeter containment levee and along slurry pipeline	Monthly (Same as above)
Once per dredging episode prior to the initial discharge, then twice weekly for the remainder of the episode	Decant water[1]	Grab sample from inboard side of discharge weir	Monthly (Same as above)
All of the above as appropriate for the type of monitoring performed	All of the above	All of the above	Annual Summary Report (March 1 of the following year)

[1] See Table 1. Standard Analyses for Decant Water in Part A, Section C.6.

2. The Discharger shall submit decant water monitoring results to Regional Board staff prior to the initial discharge of decant water for each dredging episode. Decant water shall not be allowed to discharge from the rehandling/disposal site until staff has concurred that monitoring data demonstrates compliance with the decant water discharge limits for pollutants listed under Provision D.2.
3. The Discharger may submit a written request to reduce the frequency of monitoring for constituents listed in Table 1 based on monitoring data collected and analyzed according to the conditions of this SMP which demonstrate that the temporal variability of these constituents is low enough to justify less frequent monitoring. The request should include a proposed revised monitoring schedule

for the subject constituents. The request and schedule must be approved in writing by the Executive Officer prior to implementation by the BMKCSD.

4. All reports shall be submitted to the Regional Board case manager at:

   California Regional Water Quality Control Board
   San Francisco Bay Region
   1515 Clay Street, Suite 1400
   Oakland, CA 94612

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. R2-2003-0030.
2. Was adopted by the Board on April 16, 2003; and
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Dischargers, and revisions will be ordered by the Executive Officer or the Board.

Loretta K. Barsamian

Loretta K. Barsamian
Executive Officer